Sixth Graders as Teachers –
Gary Lam

Narrative Description of Technology Use In the Classroom

Our Sixth Grade class uses technology in many ways. Students are constantly working with many types of hardware. They are required to use the computer, digital camera, scanner, printers, and card scanners. Along with the introduction and lessons on use of the hardware are detailed instructions with many different software packages. The students are introduced to different software packages by modeling by myself, and peers in the classroom. Instruction in Microsoft Office, Adobe Photo Elements, and My Label Maker are presented through the use of a projector directly connected to a classroom computer. Our students work with Accelerated Math, Accelerated Reading, Star Math, and Star Reading as well. Little instruction is presented for these particular programs, however exposure to the programs and their use is constant and never ending.

Students consistently take reading tests for comprehension with the Accelerated Reading Program. The students also work on math objectives using the Accelerated Math Program. The Star Reading and Math Programs are used as diagnostic tools at least three times a year. This information helps direct classroom objectives and remediation. Students are required to use Microsoft Word to create written documents for language. These documents include downloading text and pictures from the internet, as well as incorporating pictures that the students have taken themselves. Personal writing and statements of opinion are required as well.

We currently have an economics unit in which I teach the students about the subject of economics, and then incorporate technology into a classroom business. The students generate mailing labels that they sell to our community members. These labels are produced on the computers and then printed with our current technology. Revenues that are generated in this program are then spent purchasing leather kits such as wallets and checkbooks. This allows the students to learn another valuable skill such as leather tooling. We have found this to be an incredible learning tool for our students. This generates a sincere interest in the use of technology and gives a direct relation to our economics unit as well.

Microsoft's Powerpoint program is also currently important to our sixth grade classes. Students receive instruction on this program from the teacher and are given time to experiment and learn about the program. They then have a time in which they can share cool things that they have learned on their own with their peers. After the sharing process has been completed, they receive their first assigned electronic presentation assignment. This can be in almost any academic subject, however we often associate this step with our science projects. Our students are assigned a Powerpoint presentation with their mouse-trap and balloon car projects. When all are completed, we share each presentation with the entire class. Students seem to enjoy presenting their work to peers much more in this manner than the traditional report where they often feel self-conscious in front of the class.

The students constantly take digital pictures of activities in the classroom and often use these to decorate the bulletin boards that display the different projects they are working on. We have received wonderful feedback from parents on the ability of our students to help them at home with the use of computers, scanners, digital cameras and even cell phones. We hope to continue this practice.

Impact of Technology Use on Student Performance

I believe that the use of technology in the classroom has many impacts on student performance. It is apparent that we must use both concrete and abstract thinking to function at our highest ability. Using concrete models are wonderful ways to begin the learning process, however this should be only a starting point, and probably a remediation point for our students learning. Abstract thinking requires a higher level of thinking and reasoning. Using technology often promotes this type of thinking. We do not always understand why something happens, however we are capable of making it happen with the assistance of technology. A nice mixture of concrete modeling and the promotion of abstract thinking will help all of our students become more rounded individuals.

I have found that the use of technology in the classroom has allowed the followers to often become leaders, and the leaders to become seekers of information. Physical size, specific subject strengths, and classroom social order seem to fall to the wayside when using technology in the classroom. Student roles are often reversed in the classroom social order. Many of the traditionally strong students find that they must seek help or advice from non-traditionally strong students. This allows for better interaction in the classroom, and helps build individual self concepts. Technology allows many students to express their inner feelings with less restriction than traditional methods. The frightening experience of giving a report to the rest of the class is often eliminated, and we often find students that are weak in certain areas, beg to be first or can hardly wait to show off their personal work.

I believe that the more familiar students are with the technology they come into contact with, the better chance they have of performing well. An example of this can be found with any student that feels incredible anxiety in the operation of a computer when completing standardized testing. A lot of our standard testing is completed using the computer as the main tool for administering the tests. As an educator, I can't believe that anyone can do their best without a familiarity with the tools required to do the job. To lesson this anxiety is bound to increase their comfort zone and allow them to do better on a test. I have witnessed students that have increased their scores on these type of tests by just raising their comfort level with computers. Our standardized testing is to measure and collect data about mastery of subject content, however we often fail to raise the comfort level before checking for content mastery. If we fail to build a comfort zone in which our students can work, we are bound to have lower test results as well.

Direct comparison of student grades when using technology based lessons in comparison to traditional paper and pencil methods, lead me to believe that technology can often be the catalyst needed to get some students to perform much better. I have watched C students raise their grades, increase their confidence, and change from a less productive individual into a very productive leader in the classroom.

Narrative Budget

I propose to purchase three Sony CD-350 Mavica Digital Cameras to use in the classroom. Unit cost for each of these is $400.00 a piece. Total cost for cameras would be $1200.00. Along with the cameras I would like to purchase an extra Lenmar Replacement Camera Battery at a cost of $40.00, as this would allow for always having an extra charged battery. To effectively use the cameras I propose to purchase a Hewlett-Packard Photosmart 8150 Color Photo Printer at a cost of $180.00. With the printer I would purchase the following ink cartridges as well. Two Hewlett Packard C9349BN Tricolor at a cost of $126.00, and four HP C8767WN High Capacity Black at a total cost of $120.00. The last hardware that would be required would be four, 256 meg jump drives, that would be used for storage of pictures and easy transportation from school to student's homes. Total cost for these items would be $160.00. I would like to have an additional $174.00 to purchase media related items for the camera and the printer Total budget required to purchase all of the proposed hardware is $2000.00.

Student stipends for instructing our senior citizens would total $500.00 and teacher stipends would total $500.00 as well. Total stipend money required would be $1000.00. Total Grant proposal $3000.00.

Enhancement In the Classroom

I believe that the purchasing of the proposed technology will enhance the learning of my students in many ways. This equipment will allow for more students to work with each piece of hardware in a timely fashion. The ability to group individuals that all have the same type of equipment is bound to increase their ability to help each other. Having the same model of equipment available, ability to use the same software, and having more than one student operating and becoming familiar with the equipment at a time, will make total classroom instruction simpler. We often find that our ability to give enough individual instruction is limited by the amount of time we have. Having enough technology to allow hands on instruction, for more than one student at a time is bound to increase students understanding of the tools.

The purchasing of this equipment should allow my students to become mentors for our older community members and help build self-worth for each student. The chance to interview for a Sixth Grade Tech position, receive a stipend, and reverse roles with the older generation in our community should greatly impact each student in a positive manner. This should increase public awareness of technology in our school, our class, and our community. Interaction with an older generation in a controlled manner should be an education as well.

To allow our students to interact with our community members as teachers, will have a positive effect on both the students and our community population. I also believe that the chance to earn a stipend for demonstrating technological knowledge, will create a positive impact by creating a higher desire to participate in the overall project. This need to demonstrate a higher level of technological literacy, should also impact how each student completes class projects.

Using our young people to help educate our older population will have a positive and lasting impact on our students. It will help create good will within our school and our community. I hope that you will consider this proposal.

Qwest Foundation for Education Grant Expenditure Plan
(Standard IFARMS Budget Format)

Activity Sixth Graders as Teachers	100 Salaries	200 Benefits	300 Contractual Agreements	400 Materials and Supplies	500 Capital Objects	**TOTAL**
(3) Sony CDE-350 Mavica Digital Cameras					$1200.00	$1200.00
Lenmar Battery				$40.00		$40.00
Hewlett Packard Photosmart 8150 Color Photo Printer					$180.00	$180.00
(2) HP C9349BN Tricolor ink cartridges				$126.00		$126.00
(4) HP C8767WN High capacity Black ink cartridges				$120.00		$120.00
(4) 256meg Jump Drives				$160.00		$160.00
Additional Disks / Paper						
(10) Student Stipends @ $50.00 each				$174.00		$174.00
(2) Teacher Stipends @ $250.00	$500.00					$500.00
	$500.00					$500.00
TOTAL	$1000.00	na	na	$620.00	$1380.00	$3000.00